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10/797,532	03/10/2004	Scott S. McDaniel	14883US02	4394

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Christopher C. Winslade
McAndrews, Held & Malloy, LTD
500 West Madison St.
34th Floor
Chicago, IL 60661

EXAMINER

NGUYEN, BRIAN D

ART UNIT	PAPER NUMBER
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2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/797,532	Applicant(s) MCDANIEL ET AL.	
	Examiner BRIAN D. NGUYEN	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51-56 is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawing is objected to because all blocks in figures 1-3 should be labeled with descriptive legends. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 35 is objected to because of the following informalities:

Claim 35, line 2, it is suggested to replace “the first switch” with --a first switch--.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 1-21 and 37-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1-21, the limitations: “a network interface card (NIC) that comprises a host NIC” and “a management device NIC” were not described in the specification.

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Regarding claims 37-40, the limitations: “a management device NIC” were not described in the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 22-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "if the first NIC fails, the network traffic does not pass through the manager unless the network traffic is management traffic" is unclear because when the first NIC fails, no traffic can pass through the first NIC. It is suggested to insert --the first NIC to-- after “not pass through” in line 8 and insert --the second NIC to-- after “not pass through” in line 10.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-12, 16-18, 21, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz et al (6,757,725).

Regarding claims 1-2 and 21, Frantz discloses a communications system, comprising: a network interface card (NIC) that comprises a host NIC (see shared NIC 210 in figure 2); and a management device (management sub-system 140) coupled to the host NIC, wherein the host NIC merges communications traffic of the management device and a host (see, for example, col. 2, lines 54-61), wherein the management NIC and the host NIC are different NICs (see the NIC 210 in figure 2 is different from other elements in figure 2). Frantz does not specifically disclose the management device is not coupled to a management device NIC. However, because Frantz teaches that the NIC 210 is a shared NIC for communication between the management device and a host and the network, and in col. 8, lines 58-65, Frantz teaches that other arrangements and partitions of transmission is possible and may be practiced by one skilled in the art implementing the present disclosure, and in col. 10, lines 4-7 that the principles of the invention are applicable to any system in which it is desirable to have a computer, workstation, or server share a NIC with another device to which it is connected. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to relocate the shared NIC 210 to other location so that the management device is not coupled to a management device NIC in order to simplify the management device because no matter where the shared NIC is located, it is still performing the same function that sharing the interface with the network between the management device and the host.

Regarding claims 3-6, Frantz discloses features described in claims 3-6 (see figures 1 and 2 and col. 1, lines 16-24).

Regarding claims 7-10, Frantz discloses filters, processor, and MAC that perform functions described in claims 7-10 (see, for example, col. 7, lines 6-10; col. 8, lines 49-54; and processors 25 and 150 in figure 2).

Regarding claims 11 and 12, Frantz discloses the use of command to configure the filter (see col. 7, lines 7-10 and col. 9, lines 55-67).

Regarding claims 16 and 17, Frantz discloses processor and MAC that perform functions described in claims 16 and 17 (see, for example, col. 8, lines 49-54 and processors 25 and 150 in figure 2).

Regarding claim 18, Frantz discloses the management traffic, command and response are passed between the NIC and the management device (see col. 2, lines 42-48).

Regarding claims 37 and 38, Frantz discloses a method for communications, comprising: (a) providing access to and from a network for a management device via a host NIC(see figure 2); (b) configuring one or more filters of the NIC via one or more commands generated by the management device (see col. 7, lines 6-10); (c) filtering incoming packets via the one or more filters (see col. 7, lines 6-10); and (d) forwarding the filtered packets based upon one or more matches between information carried by the filtered packets and one or more filtering parameters and the filtered packets to the management device for local processing (see col. 2, lines 49-61). Frantz does not specifically disclose the management device is not coupled to a management device NIC. However, because Frantz teaches that the NIC 210 is a shared NIC for communication between the management device and a host and the network, and in col. 8, lines 58-65, Frantz teaches that other arrangements and partitions of transmission is possible and may be practiced by one skilled in the art implementing the present disclosure, and in col. 10, lines

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4-7 that the principles of the invention are applicable to any system in which it is desirable to have a computer, workstation, or server share a NIC with another device to which it is connected. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to relocate the shared NIC 210 to other location so that the management device is not coupled to a management device NIC in order to simplify the management device because no matter where the shared NIC is located, it is still performing the same function that sharing the interface with the network between the management device and the host.

Regarding claim 39, Frantz discloses the incoming packets to the NIC are forwarded as received if the incoming packets do not carry information matching one or more filtering parameters (see col. 2, lines 56-61 where incoming packets are forwarded as received to the server if the destination address of incoming packets are not matched the address of the management sub-system. See also paragraph 07 of the background of the intention of the applicant's application).

Regarding claim 40, Frantz discloses the incoming packets to the NIC are forwarded as received if the one or more filters are not properly configured (see col. 2, lines 49-61; col. 8, lines 49-65; and col. 9, lines 55-67 where Frantz teaches of configuring the system routing. Assuming that the address of the management sub-system is not properly configured, then none of the incoming packets will be forwarded to the management sub-system. The incoming packets will be forwarded to the server 100 and to elements of the server 100).

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz in view of Robotham et al (2004/0100964).

Regarding claim 13, Frantz does not specifically disclose storing only a latest response to a received and expected command. However, to store a latest response or to any other response is a matter of choice. Robotham discloses storing the latest response (ACK) (see paragraph 0053). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to store the response as taught by Robotham in the system of Frantz in order to determine which response(s) were not received.

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz in view of Kobayashi et al (2003/0179712).

Regarding claim 14, Frantz does not specifically disclose the command and the response each comprises an identical sequence number. However, this feature is well known in the art. Kobayashi discloses this feature (see paragraph 2241). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to return a response corresponding to each sequence number as taught by Kobayashi in the system of Frantz in order to distinguish one response from the others.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz in view of Basic et al (2004/0156350).

Regarding claim 15, Frantz does not specifically disclose stores a particular command until a corresponding response has been received. However, this feature is well known in the art. Basic discloses this feature (see paragraph 0015). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to stores a particular command until a corresponding response has been received as taught by Basic in the system of Frantz in order to save the packet for retransmission when needed

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12. Claim 20 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz in view of Downer (2003/0122683).

Regarding claim 20, Frantz discloses all the claimed subject matter as described in previous paragraphs except for system sensors. However, a management system with sensors is well known in the art. Downer discloses this feature (see sensor 306). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the sensors as taught by Downer in the system of Frantz in order to detect and report system operation information.

13. Claims 41, 43, 45-46, and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz in view of Kobayashi and Brasic.

Regarding claims 41, 43, 45-46, and 49-50, Frantz discloses a method of communications between a NIC and a management device, comprising: generating a command in the management device, sending the command to a selected NIC; executing the command in the selected NIC; and generating a response to the command (see, for example, figure 2; col. 2, lines 49-61; and col. 9, lines 55-67). Frantz does not specifically disclose the management device not having a dedicated management NIC. However, because Frantz teaches that the NIC 210 is a shared NIC for communication between the management device and a host and the network, and in col. 8, lines 58-65, Frantz teaches that other arrangements and partitions of transmission is possible and may be practiced by one skilled in the art implementing the present disclosure, and in col. 10, lines 4-7 that the principles of the invention are applicable to any system in which it is desirable to have a computer, workstation, or server share a NIC with another device to which it is connected. Therefore, it would have been obvious to a person of ordinary skill in the art at the

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time the invention was made to relocate the shared NIC 210 to other location so that the management device not having a dedicated management NIC in order to simplify the management device because no matter where the shared NIC is located, it is still performing the same function that sharing the interface with the network between the management device and the host. In addition, Frantz does not specifically disclose the command and the response comprises a sequence number, storing the command, and resending the command. However, these features are well known in the art. Kobayashi discloses sequence number (see paragraph 2241) and Brasic discloses storing and resending the command (see paragraph 0015). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the sequence number and storing the command as taught by Kobayashi and Brasic in the system of Frantz in order to help identifying and managing the transmission of packets in the network.

14. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz in view of Kobayashi and Brasic and further in view of Yi et al (2003/0099305).

Regarding claim 42, Frantz in view of Kobayashi and Brasic does not specifically disclose delete the stored command. However, this feature is well known in the art. Yi discloses deleting successfully transmitted command (see paragraph 0022). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to delete the command as taught by Yi in the system of Frantz in order to free memory.

15. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz in view of Kobayashi and Brasic and further in view of Robotham.

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Regarding claim 44, Frantz in view of Kobayashi and Brasic does not specifically disclose storing only a latest response to a received and expected command. However, to store a latest response or to any other response is a matter of choice. Robotham discloses storing the latest response (ACK) (see paragraph 0053). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to store the response as taught by Robotham in the system of Frantz in order to determine which response(s) were not received.

16. Claims 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frantz in view of Kobayashi and Brasic and further in view of Simonoff (2002/0016861).

Regarding claims 47 and 48, Frantz in view of Kobayashi and Brasic does not specifically disclose re-executed the command. However, Simonoff discloses re-executed the conflicting commands. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to re-executed the command as taught by Simonoff in the system of Frantz in order to guarantee the command is executed.

Allowable Subject Matter

17. Claim 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

18. Claims 22-36 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

19. Claims 51-56 are allowed.

Response to Arguments

20. Applicant's arguments filed 3/11/08 have been fully considered but they are not persuasive.

The applicant requests for interpretation of “descriptive legends”. The interpretation for the descriptive legends is described in MPEP 1.84(o). The applicant further argues that claim 1 now includes the limitation “a network interface card that comprises a host NIC”. This limitation is not described in the specification. The applicant also argues that claim 1 now recites “wherein the management device is not coupled to a management device NIC, and wherein the management NIC and the host NIC are different NICs.”. The rejection for these limitations is described above.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN D. NGUYEN whose telephone number is (571)272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

4/1/08

/Brian D Nguyen/
Primary Examiner, Art Unit 2616